BEFORE THE STATE OF WASHINGTON
ENERGY FACILITY SITE EVALUATION COUNCIL

In the Matter of Application No. 2004-01 WIND RIDGE POWER PARTNERS, LLC. WILD HORSE WIND POWER PROJECT	EXHIBIT 70 (LS-T) COUNSEL FOR THE ENVIRONMENT'S PREFILED DIRECT TESTIMONY

COUNSEL FOR THE ENVIRONMENT'S PREFILED DIRECT TESTIMONY
WITNESS: LEE STREAM

A. BACKGROUND

Q. Please state your name and business address for the record.

A. Leray (Lee) Stream, 1701 South 24th Avenue, Yakima, Washington.

Q. Where are you employed?

A. Washington Department of Fish and Wildlife.

Q. What is your position at the Washington Department of Fish and Wildlife (WDFW)?

A. Regional Wildlife Program Manager.

Q. What are your duties and responsibilities as Regional Wildlife Program Manager?

A. I supervise Wildlife Program activities in central Washington. Program activities include data collection and analysis, land and wildlife management, management of wildlife related recreation, and participation in wildlife related research. WDFW has a number of research scientists in its employ, including Dr. Matt VanderHagen and Dr. Mike Schroeder. Doctors VanderHagen and Schroeder are nationally recognized experts on shrub steppe habitat and Sage Grouse, respectively. I have consulted extensively with Doctors VanderHagen and Schroeder regarding the

Wild Horse Wind Power Project (Wild Horse), and my testimony is the consensus of our thoughts. Doctors Vander Hagen and Schroeder are available for any additional information required and available to provide testimony if needed.

Q. Are you familiar with Wind Ridge Power Partners LLC's application to build Wild Horse?

A. Yes.

Q. What documents have you reviewed?

A. The draft environmental impact statement (DEIS) for the project. The bulk of my testimony, however, applies to any industrial development in this particular location, and for that matter, to any development industrial or otherwise in this location.

Q. Is the information contained in these sections and exhibits within your area of expertise?

A. Yes. I have been employed by the WDFW (previously Department of Wildlife and Game) for over 30 years, all in eastern Washington. The past 25 years I have worked out of the Yakima Regional office, only 40 miles from the project site.

Q. Please identify exhibit 70-1 (LS-1).

A. Exhibit 70-1 (LS-1) is a resume of my educational background and employment experience.

B. HABITAT

Q. Do you have any concerns about the area the project will occupy? If so, why?

A. Yes. The project is located in the connective link of shrub steppe that could isolate sage grouse from the northern units in the Moses Coulee from the southern populations on the Yakima Training Center.

Q. What is the importance of this shrub steppe habitat?

A. We have lost most of the shrub steppe habitat that existed 150 years ago. Shrub steppe has declined in Washington nearly 60% from historical levels (Status of

Washington's Shrub-Steppe Ecosystem, August 1996). Much of what remains is fragmented into patches either too small to function properly or too isolated from other shrub steppe habitats, or both. Degradation of habitat reduces the productivity of a sizable percent of the remaining shrub steppe habitat.

Shrub steppe areas with deep soils were historically the most productive and thus were selected for farming, leaving the poorer sites in shrub steppe. The exceptions are areas with federal protection such at the Yakima Training Center and Hanford Nuclear Reservation. WDFW has acquired lands to the south and north of the Wild Horse project site in an effort to protect shrub steppe and provide for winter range for wildlife. WDFW acquisition of land around the site is a powerful statement regarding our view of the importance of the area. This area provides the critical linkage of shrub steppe habitat south to north in Washington. Most other shrub steppe habitat has been converted for residences, agriculture, and other uses. Much of the remaining shrub steppe habitat occurs in relatively small patches, which has diminished value. The only large remaining block of shrub steppe habitat in the State surrounds the project area. To the north, publicly owned shrub steppe habitat stretches along the west side of the Columbia River to Wenatchee. This area includes the Colockum and Quilomene wildlife areas, administered by our agency. To the south, publicly owned land (primarily in the Yakima Firing Range and Hanford Nuclear Reservation) extends to the Rattlesnake Hills. Management of the Yakima Firing Range has allowed it to serve as a *de facto* wildlife refuge. Dividing these two areas is a wedge of 25,000 acres of privately owned land. The applicant's project, is proposed in the middle of this private block.

WDFW has recognized the value of this private block for years. To date, it remains undeveloped and provides important wildlife values. Foremost among these values is that it serves as the link connecting the publicly owned wildlife lands to the north with those to the south. Development of the lands will sever the north block from the south block and cause unmitigatable harm to our efforts to preserve large blocks of shrub steppe habitat.

Q. Why is shrub steppe a Washington State priority habitat?

A. Shrub steppe has been given this designation because of the many wildlife species that dependent on it. Wildlife dependent on shrub steppe include sage grouse, sage thrasher, sage sparrow, and brewers sparrow. Many shrub steppe associated wildlife species, including mule deer, elk, jackrabbits, grasshopper sparrow, vesper sparrow, loggerhead shrike, northern harrier, red-tailed hawk, golden eagle, western meadowlark, horned larks, and many other species require large areas of land. Thus, management of shrub steppe wildlife tends to focus on large tracts. Smaller areas of shrub steppe are also important to songbirds, mammals, and reptiles, which depend upon native shrub steppe.

Q. What is the importance of the connectivity of the shrub steppe in this region?

A. Using sage grouse as an example. Two isolated populations remain in Washington. One is north of the project area in Douglas County. One is South of the project area on the Yakima Training Center. It is unlikely that either population is viable in the long term without the number of birds and their genetic diversity increasing. Unfortunately, most of the historic habitat that these birds might have utilized is gone. The only option is along the west bank of the Columbia River. If

development blocks the connectivity of the habitat, and therefore the connection between these populations, it may spell their long-term demise.

Q. Do you have any concerns about comments made about the project in the DEIS regarding habitat impact to wildlife?

A. The DEIS recognizes the significance of this area to shrub steppe habitat connectivity. It assumes that the remainder of the private land surrounding this site will remain as shrub steppe habitat. WDFW would be far less concerned about this project if we could rely on that assumption.

Generally, habitat loss is an accumulation of multiple projects. The DEIS analysis does not account for the cumulative impact of multiple developments in the area or, for that matter, future build out of this project. The context of this project in the middle of a wildlife area is a large concern. It's one thing to have a 5,000-acre industrial development in the middle of a wildlife refuge/wilderness area. However, the potential development of the 20,000 acres adjacent to the project site would a serious blow to shrub steppe habitats and the wildlife that depends on it. Development in the center of a wildlife area compromises the values that the wildlife area was purchased for; it reduces its value to wildlife and recreation. The bigger the conversion or development, the more impact sustained by the surrounding wildlife area.

Q. Are you familiar with the WDFW Wind Power Guidelines?

A. Yes.

Q. Did you assist in the negotiations or drafting of the Guidelines?

A. No, but I have consulted extensively with Jeff Tayer, Regional director for the Yakima Region. He was directly involved.

Q. Is this project consistent with the WDFW wind power guidelines?

A. It is my opinion and Mr. Tayer's that the guidelines were never intended to address the landscape level issues that Wild Horse brings into play. The guidelines are

intended to mitigate for the footprint of the site, permanent and temporary. They intend to encourage siting on cropland instead of shrub steppe habitat. The guidelines are not intended to identify areas of the state that are more or less sensitive from a habitat perspective. They are blind to the landscape context of a project. Conceptually, this project is the opposite of the intent of the guidelines from WDFW's perspective. The guidelines intended to encourage siting away from shrub steppe. This project is in the middle of the most important shrub steppe in Washington.

C. SAGE GROUSE

Q. Do you have any concerns about the project's impact on sage grouse in the area?

A. Yes. This project blocks the linkage of habitat for sage grouse to the north and south. Additionally, the project is sited in an area with consistent sage grouse observation and which was historically a lek site. (A lek is a traditional mating ground of the sage grouse.)

Q. Do you have any concerns about the affect of Wild Horse on the state's Sage Grouse Recovery Area?

A. Shrub steppe habitat in the area of the project is characterized as good. An indicator species for shrub steppe habitat is the sage grouse. The sage grouse historically occupied millions of acres of shrub steppe habitat in Washington and throughout the West. Today, little of that habitat remains. As a result, sage grouse and other species that depend on shrub steppe habitat are in decline. Washington sage grouse populations have declined about 92% from historic levels. Similar declines are likely for other shrub steppe dependent species like sharp tailed grouse, sage sparrow, pygmy rabbits, ferruginous hawk, and sage thrasher.

WDFW has listed the sage grouse as a threatened species given special protection under Title 77 RCW. As a result of this listing, we have prepared a recovery plan. WDFW has prioritized sage grouse for research, land acquisition, population augmentation, and landowner incentives both state and federal. WDFW had focused on this site, rating it as the highest priority for acquisition in central Washington. Sage grouse have been observed in recent years in and around the Wild Horse project site, including sightings of hens with broods (Lee Stream, WDFW data). Although no active leks were located during surveys for this project, the presence of broods indicates reproductive populations occur in the area. Sage grouse populations have dwindled to such low level that birds were trapped in Oregon and released on the Yakima Training Center. A radio marked female sage grouse released with this group of birds spent much of 2004 in the area near this project. The vegetative make-up of the area, with the predominance of sagebrush, is also conducive for sage grouse because the grouse's primary food source is sagebrush.

The Washington Sage Grouse Recovery Plan identifies the landscape containing the Wild Horse as The Colockum Management Unit. The Unit connects habitat on the Yakima Training Center, to the south, with habitat on the Moses Coulee Unit, on the north. There are no other connections south to north in Washington State. Two populations of sage grouse currently exist in Washington, to the north in Douglas County, and to the south on the Yakima Training Center. The intact shrub steppe landscape between the Kittitas Valley and the Columbia River is the necessary connection to link these two populations for recovery.

D. BIG GAME

Q. What big game animals primarily populate the Wild Horse project area?

A. The project site is also located within habitats designated by WDFW as winter range for mule deer and elk. It is also located adjacent to the Quilomene elk migration corridor and is approximately 0.5 miles from the Colockum elk wintering and migration traveling area. In particular, the riparian corridors of Whiskey Dick Creek and those associated canyons provide cover and water for the mule deer and elk in this area.

Q. Do you have any concerns regarding the impact of construction activities on the big game population in the area?

A. Elk and Deer are particularly vulnerable to reduction in winter range. This problem is so acute that the majority of lands owned by WDFW are intended to provide winter range for elk and deer. Barriers to traditional migration routes also impact mule deer. We know through various relocation efforts that mule deer can travel many miles between summer, spring, fall, and winter habitats. Impairment in migration routes between habitats may cause significant reduction in herd size.